

SUPPLEMENTARY TABLES

Supplementary Table 1. Experimental materials and sources.

A. Experimental mice

| Strain | Age | Body weight | Sources |
|-----------------------------|---------|-------------|-----------------------------------|
| C57BL / Apoc ^{-/-} | 5 weeks | 15-20g | Guangdong Pharmaceutical Kang Co. |

B. Experimental cells

| Cell tape | Sources |
|-----------|------------------|
| RAW264.7 | Servicebio, Inc. |
| MAEC | Servicebio, Inc. |

Supplementary Table 2. *In vivo* safety: grouping and administration of mice.

| Group | Mice (n ≥ 5) | Dosage | Frequency |
|---------|--------------|--|--------------|
| Control | C57BL | 0.1 mL normal saline | 3 times/week |
| BPQDs | C57BL | 0.1 mL BPQDs in normal saline solution | 3 times/week |

Supplementary Table 3. Model and parameters of photoacoustic microscopes.

| Model | VIS-H-50, PAOMTek, China |
|-------------------------------|-----------------------------|
| Laser output wavelength (nm) | 523 |
| Imaging range (mm) | 3 |
| Imaging speed (s/Volume) | 5 |
| Lateral resolution (μm) | 4.6 |
| Axial resolution (μm) | 158 |
| Applicable targets | Mouse, Rat, Rabbit, Human |
| Driving mode | Four-way differential drive |
| Operating ambient temperature | 15-35° C |
| Imaging probe size | 22*30*13 |